

**ABSTRACT OF THE DISCLOSURE**

A method of making pneumatic tyres for vehicle wheels in which during building of the tyre on a toroidal support at least one step of a partial vulcanisation is introduced, the step enabling the overall production time to be reduced by lowering the overall time of the final moulding and vulcanisation step, while maintaining the features of the bead and the carcass ply/plies linked thereto as stated in the design specifications. More particularly, by building at least one carcass structure on the toroidal support and submitting the latter to a first vulcanisation step while exerting a pressure from the outside to the inside of the structure itself, an at least partly vulcanised carcass structure is obtained that is stable in its geometry and suitable for completing the tyre building. Subsequently, a second vulcanisation step accompanied by moulding of the tread band and the sidewalls allows a finished tyre in a more reduced overall period of time to be obtained.